

GT pressure tanks

For cold-water and heating applications



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1. Product data

Applications

The Grundfos GT pressure tanks are long-life tanks ideally suited for controlling the pressure in domestic, commercial as well as industrial applications in the following systems:

- cold-water (drinking-water) systems. See [Applications](#), page 6.
- heating systems. See [Heating](#), page 19.

Grundfos GT tanks ensure long, maintenance-free, reliable and controlled operation.

GT tanks can be integrated in many different systems with a wide variety of pumps. The large number of tank sizes and types available makes it possible to select the pressure tank that best suits the application and system in question.

Intended use

Grundfos tanks can be used both indoors and outdoors as they are rated C2 corrosivity category according to ISO 12944.

ISO 12944 distinguishes six corrosivity categories for atmospheric environments:

Corrosivity category	Environment examples according to ISO 12944	
	Outdoors	Indoors
C1	-	Heated buildings with a clean atmosphere such as offices, shops, schools, hotels.
C2	Atmosphere contaminated to a small extent, mainly rural regions.	Buildings which are not heated, where condensation may occur e.g. storehouses, sports halls.
C3	Industrial and urban atmosphere with an average sulphur oxide (IV) contamination level.	Production space of high humidity and certain air contamination e.g. foodstuff plants, laundries, breweries, dairies.
C4	Inshore areas of low salinity.	Chemical plants, swimming pools, ship repair yards.
C5	Industrial areas and inshore areas of medium salinity.	Buildings and areas of almost constant condensation and high contamination.
C5	Inshore areas and offshore areas of high salinity.	Buildings and areas of almost constant condensation and high contamination.

Volume range

Application	Position	Volume range [l]
Cold water	Vertical	8 to 5000
	Horizontal	20 to 100
Heating	Vertical	8 to 3000

Product range

The table below shows the available tank types in relation to application.

Symbol	Description	
	•	○
•	Recommended	
○	Applicable	
-	Not recommended	

Application	Tank type								
	GT -U	GT -U+	GT -H	GT -D	GT -DF	GT -C	GT -CF	GT -HR	
Heating	-	•	-	-	-	-	-	•	
Chilled water	○	•	-	-	-	-	-	•	
Sea water	-	-	-	-	-	•	-	-	
Grey water	•	•	○	○	-	○	-	-	
Drinking water	•	•	•	•	•	•	•	-	

For chilled water, a glycol-water mixture with a maximum of 50 % glycol is permissible for freeze protection.

Grey water, also known as sullage, is non-industrial wastewater generated from domestic processes, such as dish washing, laundry and bathing.

Approvals and markings

Tank type	Approvals			Markings	
	WRAS	NSF	ACS	CE	EAC
GT-U	•	-	•	•	•
GT-U+	•	-	•	•	-
GT-H	•	-	•	•	•
GT-D	-	-	•	•	•
GT-DF	-	-	•	•	-
GT-C	-	-	•	•	-
GT-CF	-	-	•	•	-
GT-HR	-	-	-	•	•

Tank type	Compliance UBA METALLE
GT-U, GT-U+, GT-H, GT-D, GT-DF, GT-C, GT-CF	•
GT-HR	-

Type key

Code	Example	GT	- U	- 25	PN 10	G 1/2	V
Type range							
Tank type							
U	Bladder						
U+	Bladder						
H	Diaphragm						
D	Double diaphragm						
DF	Double diaphragm with FlowThru						
C	Composite tank						
CF	Composite tank with FlowThru						
HR	Non-replaceable diaphragm for heating applications						
Tank volume [litres]							
Pressure rating							
Pipe connection							
Position							
V	Vertical						
H	Horizontal						

2. Construction

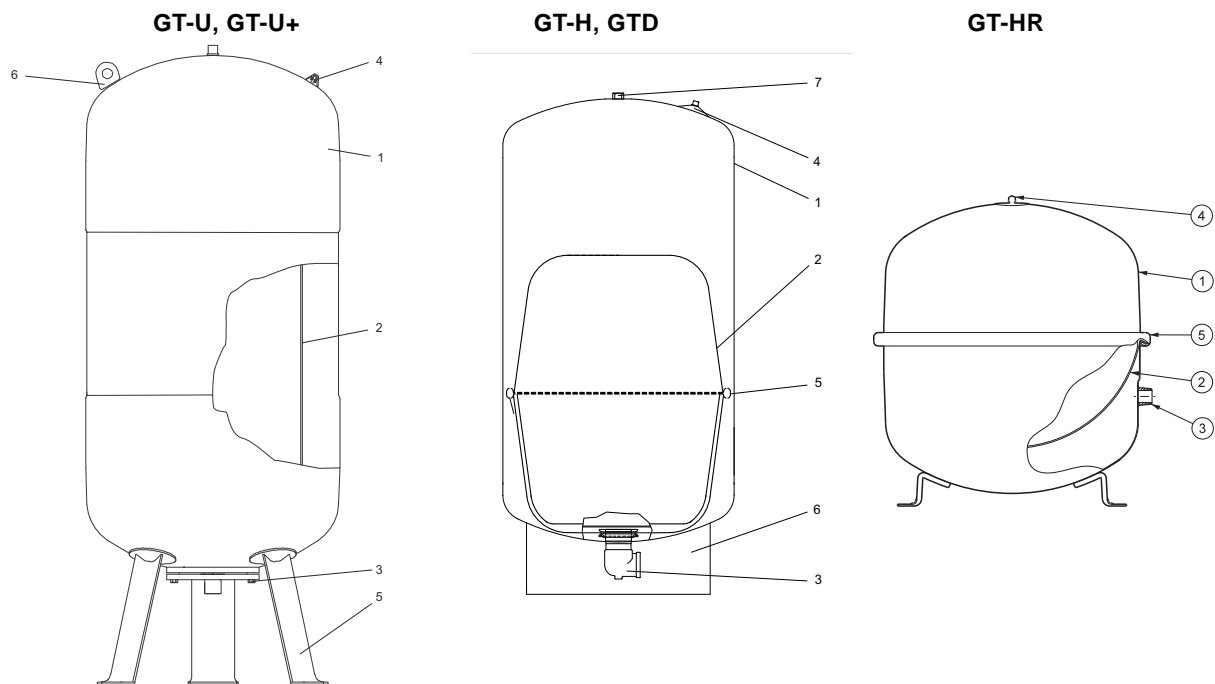


Fig. 1 Sectional drawings, examples of tanks. The actual GT tank may look different from the examples shown above.

TM03 8262 0907 - TM02 9095 0907 - TM03 1677 2705

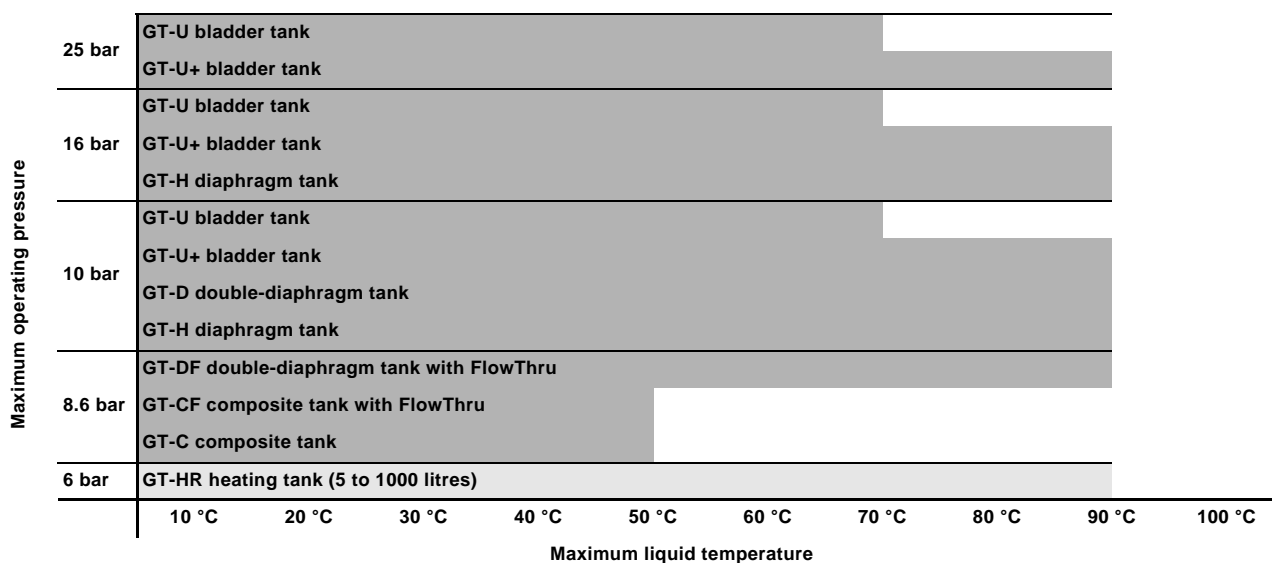
Material specifications

Pos.	Component	Material	Tank type
1	Tank body	Low-carbon sheet steel	GT-U, GT-U+, GT-H, GT-D, GT-DF, GT-HR
		Fibreglass, epoxy resin, composite	GT-C, GT-CF
2	Bladder, diaphragm	Butyl	GT-U, GT-H, GT-D, GT-DF, GT-C, GT-CF
		EPDM	GT-U+
		SBR rubber	GT-HR
3	Flange/pipe connection	Stainless steel EN 1.4301/AISI 304	GT-H, GT-D, GT-DF
		Stainless steel EN 1.4401/AISI 316 Ti	GT-U, GT-U+
		Polyvinyl chloride (PVC)	GT-C, GT-CF
		Low-carbon sheet steel	GT-HR
4	Air valve	Steel/brass	GT-U, GT-U+, GT-H, GT-D, GT-DF, GT-C, GT-CF, GT-HR
5	Clamping ring/feet	Low-carbon sheet steel	GT-U, GT-U+, GT-H, GT-D, GT-DF, GT-HR
		Polypropylene (PP)	GT-C, GT-CF
6	Lifting eye/skirt	Low-carbon sheet steel	GT-U, GT-U+, GT-H, GT-D, GT-DF, GT-HR
		Polypropylene (PP)	GT-C, GT-CF
7	Tapped hole	Low-carbon sheet steel	GT-U, GT-U+

Tank colour

Tank type	Colour	Colour code
GT-U GT-U+ GT-H GT-D GT-DF GT-HR	Grey	NCS S7005-R80B, gloss 20-35
GT-C GT-CF	Grey	-

3. Operating conditions



4. Cold water

Applications

The Grundfos GT pressure tanks for cold-water applications are long-life tanks ideally suited for controlling the pressure in domestic, commercial as well as industrial applications.

Typical applications:

- domestic water supply systems
- booster systems
- irrigation systems
- industrial systems.

GT tanks can be integrated in many different systems with a wide variety of pumps. The large number of tank sizes and types available makes it possible to select the pressure tank that best suits the application and system in question.

Tank range

GT-U, bladder tank

The pressure tank body is made of steel and is factory-precharged with nitrogen. All parts in contact with water are either made of stainless steel or coated for protection against corrosion.

The replaceable bladder for tanks with a volume exceeding 60 litres is made of high-quality rubber material suitable for potable-water and grey-water applications, such as booster systems, pressurisation and water hammer arresting.

GT-U+, bladder tank

GT-U+ has a built-in pressure gauge placed on the tank body.

You can install a pressure switch by the air valve on top of the tank in order to start and stop the pump.

The pressure tank body is made of steel.

The replaceable bladder is suitable for potable-water and grey-water applications where high-pressure ratings are required, such as booster systems, heating expansion, pressurisation and water-hammer arresting.

GT-H, diaphragm tank

The polypropylene liner combined with an FDA-approved high-grade butyl diaphragm makes up the water chamber. This is held against the tank wall with a steel clench ring.

The brass air valve, sealed by a threaded O-ring valve cap, prevents air leaks.

GT-D, double-diaphragm tank

The diaphragm is a chlorine-resistant 100 % butyl diaphragm with a precision-moulded copolymer polypropylene liner for superior air and water separation.

The diaphragm assembly is clenched together with a positive lock internal clench ring which contains drawdown water in a precharged air atmosphere, thus providing separation between the diaphragm and tank wall. This air buffer means less problems with condensation. The air chamber is sealed with a fixed O-ring and closed cell foam.

GT-DF, double-diaphragm tank with FlowThru

The GT-CF pressure tank has a steel body and the same double diaphragm as the CT-D tank.

The FlowThru connection diverts system water into and more importantly out of the tank while the pump is running. This constant flushing ensures that the water in the tank remains fresh and eliminates the risk of stagnant water during normal system operation. See fig 2.

GT-C, composite tank

The GT-C pressure tank is a lightweight pressure tank. The diaphragm is a chlorine-resistant 100 % butyl diaphragm with a precision-moulded copolymer polypropylene liner for superior air and water separation. This design allows each tank size to have a properly sized water chamber matched to the drawdown performance of that tank. A steel clench ring regulates movement and prevents the diaphragm from rubbing against the tank wall.

GT-CF, composite tank with FlowThru

The GT-CF lightweight pressure tank has the same diaphragm as the CT-C tank. The FlowThru connection diverts system water into and more importantly out of the tank while the pump is running. This constant flushing ensures that the water in the tank remains fresh and eliminates the risk of stagnant water during normal system operation. See fig 2.

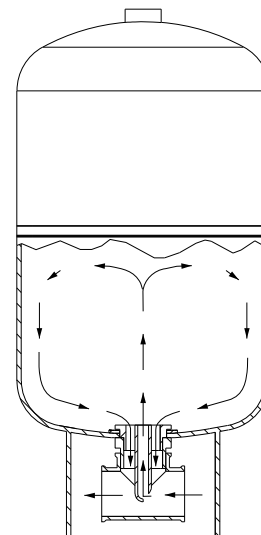


Fig. 2 Illustration of the FlowThru function

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Selection of cold water tank

Tank sizes not exceeding 450 litres

For tank sizes not exceeding 450 litres, use the diagram in fig 4 to select the optimum tank size. All you need to know is the cut-in pressure and the flow rate.

The diagram below is based on the following values:

- differential pressure: 1 bar
- number of starts and stops per hour: 20
- constant for tank precharge pressure: 0.9.

Tank sizes exceeding 450 litres

Calculate tank sizes exceeding 450 litres with the formula below.

$$V_0 = \frac{1000 \times Q_s \times (p_1 + 1) \times (p_2 + 1)}{4 \times N \times (p_0 + 1) \times (p_2 - p_1)}$$

- V_0 : Tank volume [litres]
- V_L : Air volume in tank [litres]
- V_V : Water volume in tank [litres]
- Q_s : Mean flow rate [m^3/h]
- p_1 : Cut-in pressure [bar]
- p_2 : Cut-out pressure [bar]
- p_0 : Precharge pressure, tank [bar]
- Q_P : Flow rate, pump [m^3/h]
- Q_T : Flow rate, pressure tank [m^3/h]
- N : Maximum number of starts/stops per hour

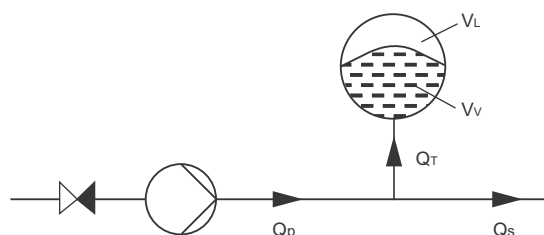
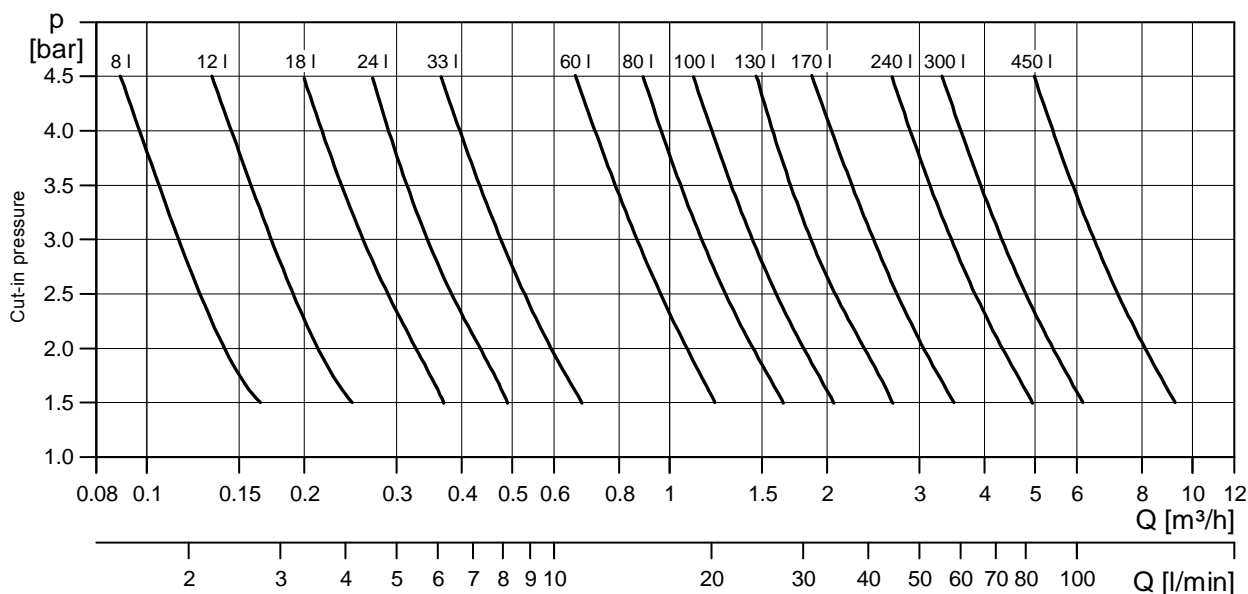


Fig. 3 Calculation of the tank volume

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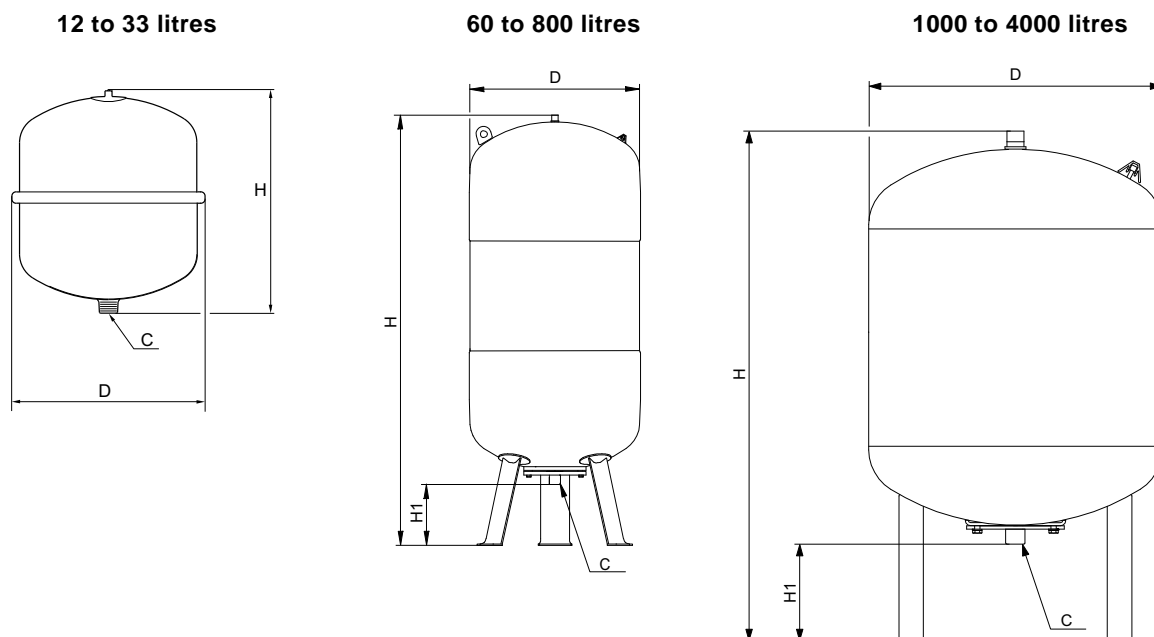
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Fig. 4 Tank size in relation to the cut-in pressure and flow rate. For tank sizes not exceeding 450 litres.

GT-U, 10 bar

Vertical installation.
Maximum pressure: 10 bar.
Precharge pressure: 4 bar.

Dimensions, weights and product numbers



TM03 1681 2809 - TM03 8257 2809 - TM03 8258 0518

Fig. 5 Dimensional sketches

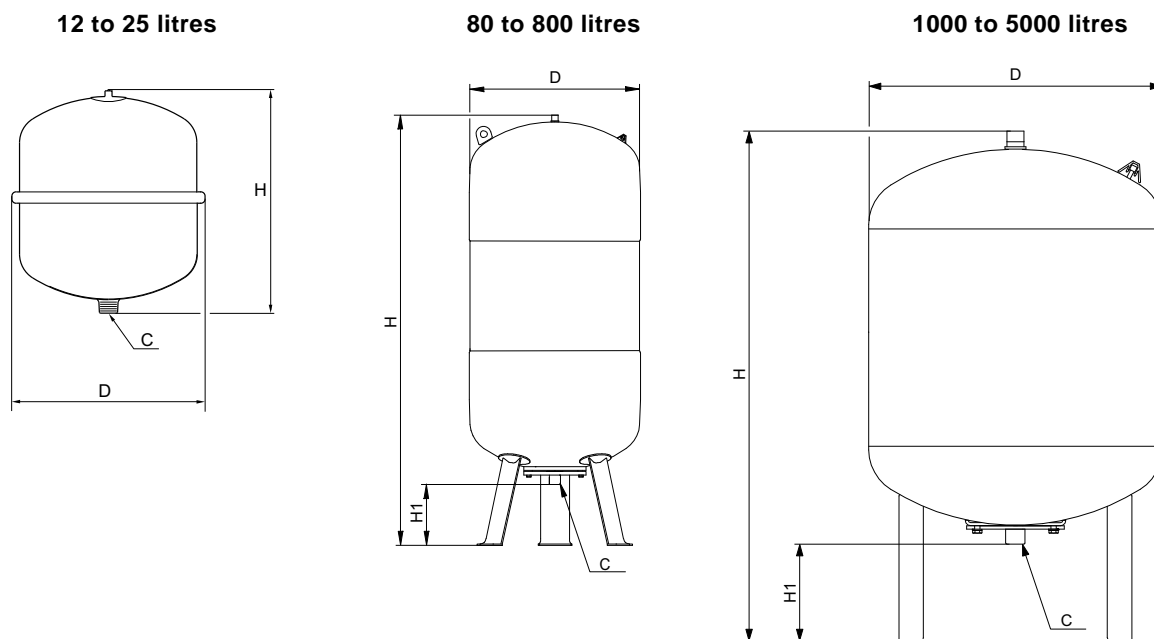
Tank type	Size [l]	Dimensions [mm]				Gross weight [kg]		Replaceable bladder	Product number	
		D	H	H1	C	Stainless-steel flange	Coated flange		Stainless-steel flange	Coated flange
GT-U-12 PN 10 G 3/4 V	12	280	307	-	G 3/4	2.5	-	-	96989120	-
GT-U-25 PN 10 G 3/4 V	25	280	520	-	G 3/4	5.5	-	-	96573253	-
GT-U-33 PN 10 G 3/4 V	33	354	454	-	G 3/4	6.7	-	-	96573254	-
GT-U-60 PN 10 G 1 V	60	409	734	-	G 1	14.3	-	-	96989123	-
GT-U-80 PN 10 G 1 V	80	480	745	153	G 1	26	17	●	96573255	96573266
GT-U-100 PN 10 G 1 V	100	480	750	153	G 1	30	22	●	96573257	96573267
GT-U-200 PN 10 G 1 1/4 V	200	634	967	150	G 1 1/4	50	50	●	96573258	96573268
GT-U-300 PN 10 G 1 1/4 V	300	634	1267	150	G 1 1/4	50	55	●	96573259	96573269
GT-U-400 PN 10 G 1 1/4 V	400	740	1245	139	G 1 1/4	76	76	●	96603444	96603450
GT-U-500 PN 10 G 1 1/4 V	500	740	1475	133	G 1 1/4	85	78	●	96573260	96573280
GT-U-600 PN 10 G 1 1/2 V	600	740	1859	263	G 1 1/2	161	161	●	96603445	96603451
GT-U-800 PN 10 G 1 1/2 V	800	740	2325	263	G 1 1/2	187	200	●	96603446	96603452
GT-U-1000 PN 10 G 1 1/2 V	1000	740	2604	263	G 1 1/2	258	258	●	96603447	96603453
GT-U-1500 PN 10 DN 65 V	1500	1200	1991	286	DN 65	-	535	●	-	96573283
GT-U-2000 PN 10 DN 65 V	2000	1200	2451	291	DN 65	-	710	●	-	96573284
GT-U-3000 PN 10 DN 65 V	3000	1500	2521	320	DN 65	-	1050	●	-	96573285
GT-U-4000 PN 10 DN 65 V	4000	1500	3070	320	DN 65	-	1140	●	-	96603454

Note: For some GT-U tanks, the bladder is available as a spare part. The part number can be found on Grundfos.com (GPC).

GT-U, 16 bar

Vertical installation.
 Maximum pressure: 16 bar.
 Precharge pressure: 4 bar.

Dimensions, weights and product numbers



TM03 1681 2809 - TM03 8257 2809 - TM03 8258 0518

Fig. 6 Dimensional sketches

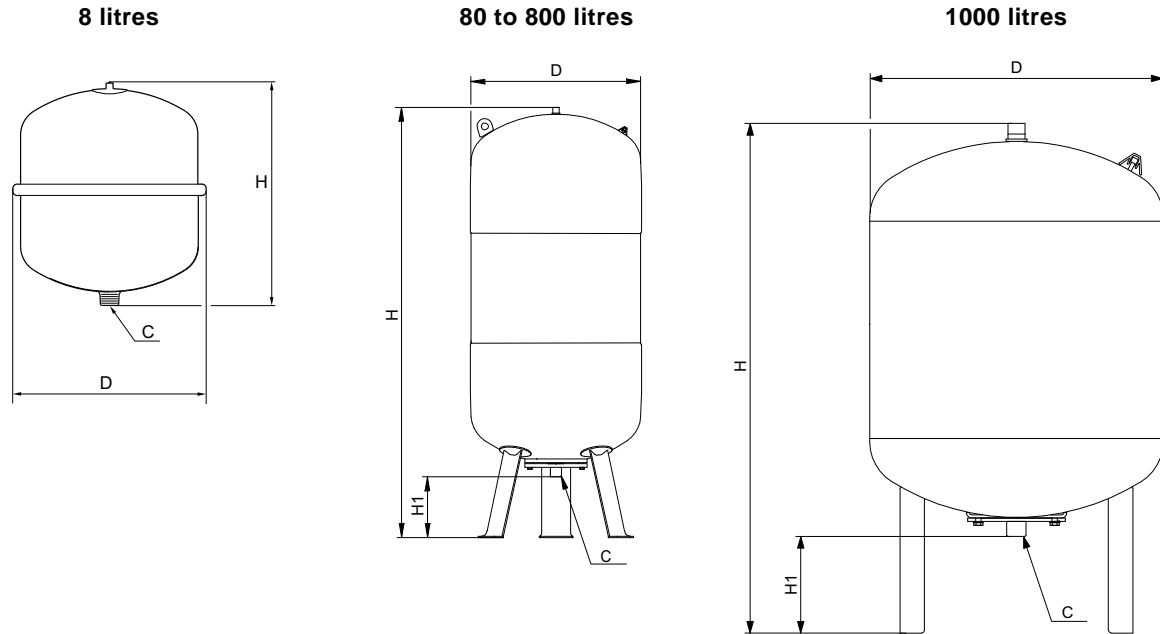
Tank type	Size [l]	Dimensions [mm]				Gross weight [kg]		Replaceable bladder	Product number	
		D	H	H1	C	Stainless-steel flange	Coated flange		Stainless-steel flange	Coated flange
GT-U-12 PN 16 G 3/4 V	12	280	309	-	G 3/4	3.6	-	-	96573348	-
GT-U-25 PN 16 G 3/4 V	25	280	520	-	G 3/4	9.0	-	-	96573349	-
GT-U-80 PN 16 G 1 V	80	480	745	153	G 1	22	22	•	96603410	96603420
GT-U-100 PN 16 G 1 V	100	480	850	153	G 1	29	36	•	96603411	96603421
GT-U-200 PN 16 G 1 1/4 V	200	634	967	150	G 1 1/4	58	49	•	96603413	96603422
GT-U-300 PN 16 G 1 1/4 V	300	634	1267	150	G 1 1/4	66	77	•	96603414	96603423
GT-U-400 PN 16 G 1 1/2 V	400	740	1394	265	G 1 1/2	117	215	•	96603415	96603424
GT-U-500 PN 16 G 1 1/2 V	500	740	1614	265	G 1 1/2	129	124	•	96603416	96603425
GT-U-600 PN 16 G 1 1/2 V	600	740	1859	265	G 1 1/2	173	161	•	96603417	96603426
GT-U-800 PN 16 G 1 1/2 V	800	740	2324	265	G 1 1/2	223	223	•	96603418	96603427
GT-U-1000 PN 16 G 1 1/2 V	1000	740	2604	265	G 1 1/2	275	264	•	96603419	96603428
GT-U-1500 PN 16 DN 65 V	1500	1200	1991	291	DN 65	-	694	•	-	96603429
GT-U-2000 PN 16 DN 65 V	2000	1200	2451	291	DN 65	-	904	•	-	96603430
GT-U-3000 PN 16 DN 65 V	3000	1500	2521	320	DN 65	-	1249	•	-	96603431
GT-U-4000 PN 16 DN 65 V	4000	1500	3110	320	DN 65	-	1364	•	-	96603432
GT-U-5000 PN 16 DN 65 V	5000	1500	3645	320	DN 65	-	1616	•	-	96603433

Note: For some GT-U tanks, the bladder is available as a spare part. The part number can be found on Grundfos.com (GPC).

GT-U, 25 bar

Vertical installation.
Maximum pressure: 25 bar.
Precharge pressure: 4 bar.

Dimensions, weights and product numbers



TM03 1681 2809 - TM03 8257 2809 - TM03 8258 0518

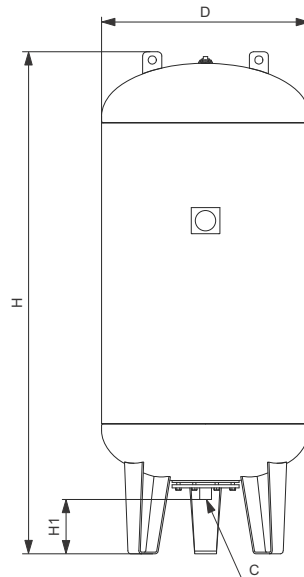
Fig. 7 Dimensional sketches

Tank type	Size [l]	Dimensions [mm]				Gross weight [kg]	Replaceable bladder	Product number	
		D	H	H1	C			Stainless-steel flange	Coated flange
GT-U-8 PN 25 G 3/4 V	8	206	335	-	G 3/4	8	-	96573347	-
GT-U-80 PN 25 DN 50 V	80	450	942	159	DN 50	107	•	-	96603459
GT-U-120 PN 25 DN 50 V	120	450	1253	159	DN 50	142	•	-	96603460
GT-U-180 PN 25 DN 50 V	180	450	1528	159	DN 50	179	•	-	96603462
GT-U-300 PN 25 DN 50 V	300	750	1318	160	DN 50	201	•	-	96603463
GT-U-400 PN 25 DN 50 V	400	750	1423	160	DN 50	302	•	-	96603465
GT-U-600 PN 25 DN 50 V	600	750	1868	159	DN 50	404	•	-	96603466
GT-U-800 PN 25 DN 50 V	800	750	2268	159	DN 50	150	•	-	96603468
GT-U-1000 PN 25 DN 50 V	1000	750	2768	159	DN 50	559	•	-	96603469

Note: For some GT-U tanks, the bladder is available as a spare part. The part number can be found on Grundfos.com (GPC).

GT-U+, 10 bar

Vertical installation.
 Maximum pressure: 10 bar.
 Precharge pressure: 4 bar.

Dimensions, weights and product numbers**100 to 3000 litres**

TM07 0604 0418

Fig. 8 Dimensional sketch

Tank type	Size [l]	Dimensions [mm]				Gross weight [kg]	Replaceable bladder	Product number
		D	H	H1	C			
GT-U+ 100 PN 10	100	453	983	130	G 1	76.5	•	99082696
GT-U+ 150 PN 10	150	504	1056	125	G 1	91.5	•	99082697
GT-U+ 200 PN 10	200	604	1103	115	G 1 1/4	123.3	•	99082698
GT-U+ 300 PN 10	300	654	1286	190	G 1 1/4	148.3	•	99082699
GT-U+ 500 PN 10	500	754	1561	190	G 1 1/4	195.5	•	99082700
GT-U+ 750 PN 10	750	756	1834	190	G 2	231.0	•	99082701
GT-U+ 1000 PN 10	1000	806	2376	280	G 2	327.5	•	99082702
GT-U+ 1500 PN 10	1500	958	2435	270	G 2	391.5	•	99082703
GT-U+ 2000 PN 10	2000	1110	2505	270	G 2	459.0	•	99082704
GT-U+ 3000 PN 10	3000	1210	2932	250	G 2 1/2	892.0	•	99082705

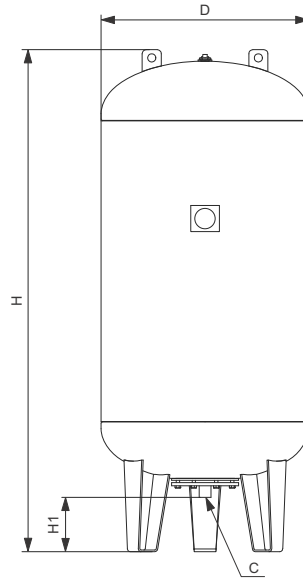
Note: For some GT-U+ tanks, the bladder is available as a spare part. The part number can be found on Grundfos.com (GPC).

GT-U+, 16 bar

Vertical installation.
Maximum pressure: 16 bar.
Precharge pressure: 4 bar.

Dimensions, weights and product numbers

100 to 3000 litres



TM07 0604 0418

Fig. 9 Dimensional sketch

Tank type	Size [l]	Dimensions [mm]				Gross weight [kg]	Replaceable bladder	Product number
		D	H	H1	C			
GT-U+ 100 PN 16	100	454	983	130	G 1	76.5	•	99082706
GT-U+ 150 PN 16	150	506	1058	125	G 1	91.5	•	99082707
GT-U+ 200 PN 16	200	606	1105	115	G 1 1/4	123.3	•	99082708
GT-U+ 300 PN 16	300	656	1288	190	G 1 1/4	148.3	•	99082709
GT-U+ 500 PN 16	500	760	1565	190	G 1 1/4	254.5	•	99082710
GT-U+ 750 PN 16	750	760	1862	190	G 2	297.5	•	99082711
GT-U+ 1000 PN 16	1000	810	2376	280	G 2	409.5	•	99082712
GT-U+ 1500 PN 16	1500	962	2443	270	G 2	498.0	•	99082713
GT-U+ 2000 PN 16	2000	1116	2511	270	G 2	717.0	•	99082714
GT-U+ 3000 PN 16	3000	1216	2938	250	G 2 1/2	1055.0	•	99082715

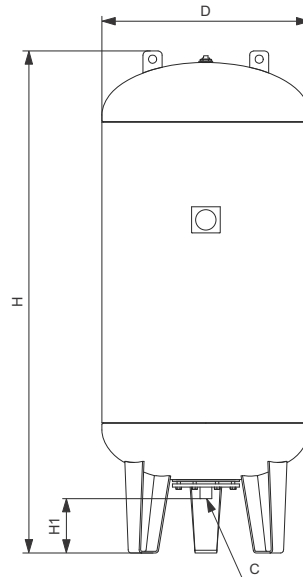
Note: For some GT-U+ tanks, the bladder is available as a spare part. The part number can be found on Grundfos.com (GPC).

GT-U+, 25 bar

Vertical installation.

Maximum pressure: 25 bar.

Precharge pressure: 4 bar.

Dimensions, weights and product numbers**100 to 3000 litres**

TM07 0604 0418

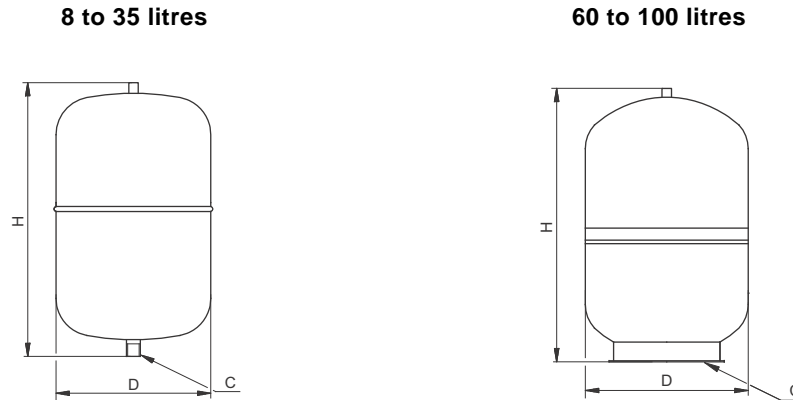
Fig. 10 Dimensional sketch

Tank type	Size [l]	Dimensions [mm]				Gross weight [kg]	Replaceable bladder	Product number
		D	H	H1	C			
GT-U+ 100 PN 25	100	458	985	130	G 1	76.5	•	99082716
GT-U+ 150 PN 25	150	508	1060	125	G 1	91.5	•	99082717
GT-U+ 200 PN 25	200	610	1109	115	G 1 1/4	151.3	•	99082718
GT-U+ 300 PN 25	300	666	1301	190	G 1 1/4	183.3	•	99082719
GT-U+ 500 PN 25	500	766	1594	190	G 1 1/4	306.5	•	99082720
GT-U+ 750 PN 25	750	766	1866	190	G 2	358.5	•	99082721
GT-U+ 1000 PN 25	1000	816	2384	280	G 2	504.5	•	99082722
GT-U+ 1500 PN 25	1500	970	2447	270	G 2	713.0	•	99082723
GT-U+ 2000 PN 25	2000	1124	2519	270	G 2	854.0	•	99082724
GT-U+ 3000 PN 25	3000	1224	2950	250	G 2 1/2	1405.0	•	99082725

Note: For some GT-U+ tanks, the bladder is available as a spare part. The part number can be found on Grundfos.com (GPC)

GT-H, 10 bar

Vertical installation.
 Maximum pressure: 10 bar.
 Precharge pressure: 1.9 bar.

Dimensions, weights and product numbers

TM02 9086 2809 - TM02 9087 2809

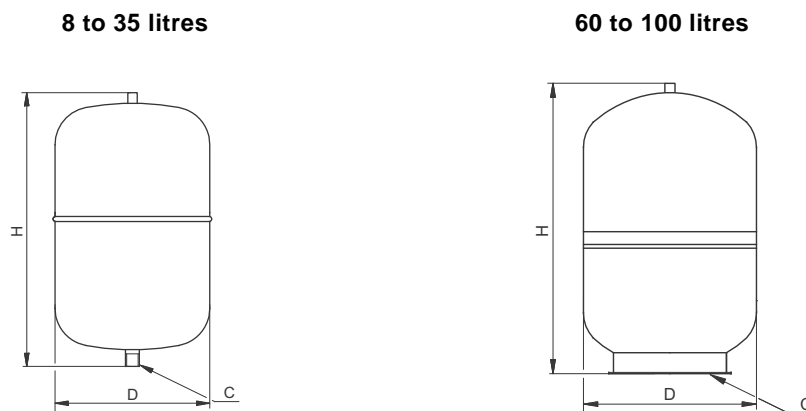
Fig. 11 Dimensional sketches

Tank type	Size [l]	Dimensions [mm]			Gross weight [kg]	Product number
		D	H	C		
GT-H-8 PN 10 G 3/4 V	8	210	340	G 3/4	2.6	96528335
GT-H-8 PN 10 G 1 V	8	204	327	G 1	2.6	96526321
GT-H-12 PN 10 G 3/4 V	12	242	392	G 3/4	3.2	96528336
GT-H-12 PN 10 G 1 V	12	230	367	G 1	3.2	97506558
GT-H-18 PN 10 G 3/4 V	18	280	385	G 3/4	4.3	96526322
GT-H-18 PN 10 G 1 V	18	280	385	G 1	4.3	96528337
GT-H-24 PN 10 G 3/4 V	24	300	460	G 3/4	5.5	97506559
GT-H-24 PN 10 G 1 V	24	300	461	G 1	5.6	96528339
GT-H-35 PN 10 G 3/4 V	35	321	558	G 3/4	7.4	96556002
GT-H-35 PN 10 G 1 V	35	321	497	G 1	7.4	96528340
GT-H-60 PN 10 G 1 V	60	391	636	G 1	12.4	96528341
GT-H-80 PN 10 G 1 V	80	391	830	G 1	17.0	96894291
GT-H-100 PN 10 G 1 V	100	436	827	G 1	20.6	97527968

GT-H, 16 bar

Vertical installation.
 Maximum pressure: 16 bar.
 Precharge pressure: 4 bar.

Dimensions, weights and product numbers



TM02 9086 2809 - TM02 9087 2809

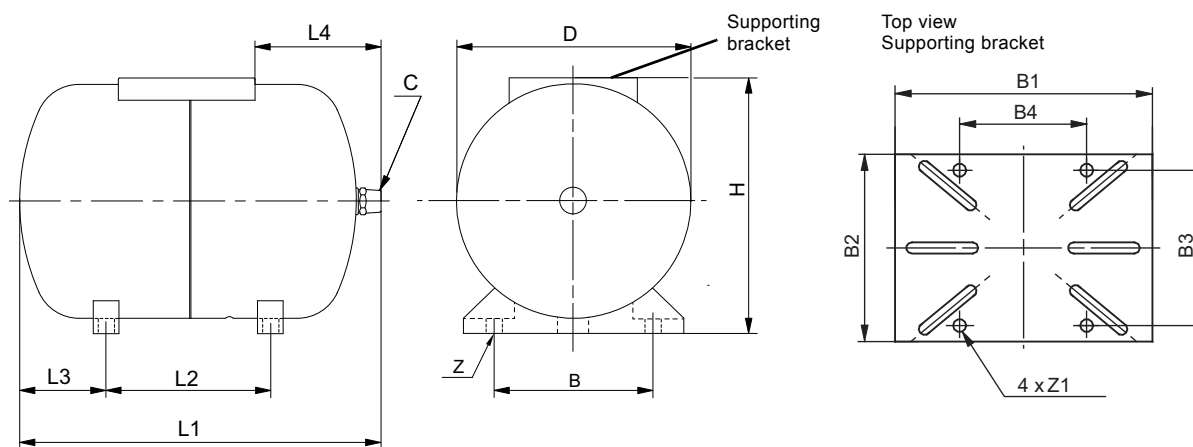
Fig. 12 Dimensional sketches

Tank type	Size [l]	Dimensions [mm]			Gross weight [kg]	Product number
		D	H	C		
GT-H-8 PN 16 G 1 V	8	204	327	G 1	2.6	96528356
GT-H-12 PN 16 G 1 V	12	242	392	G 1	3.9	96528357
GT-H-18 PN 16 G 1 V	18	280	385	G 1	5.1	96528358
GT-H-24 PN 16 G 1 V	24	300	461	G 1	6.5	96528360
GT-H-35 PN 16 G 1 V	35	321	497	G 1	7.5	96528361
GT-H-60 PN 16 G 1 V	60	391	636	G 1	15.6	96528362
GT-H-80 PN 16 G 1 V	80	391	830	G 1	21.3	96528363
GT-H-100 PN 16 G 1 V	100	436	827	G 1	27.6	99040996

GT-H, 10 bar

Horizontal installation.
Maximum pressure: 10 bar.
Precharge pressure 1.9 bar.

Dimensions, weights and product numbers



TM02 9085 2809 - TM02 1611 1501

Fig. 13 Dimensional sketches

Tank type	Size [l]	Dimensions [mm]									Gross weight [kg]	Product number
		D	H	B	L1	L2	L3	L4	Z	C		
GT-H-20 PN 10 G 1 H	20	264	292	230	447	265	92.5	118	4	G 1	5.0	98990807
GT-H-24 PN 10 G 1 H	24	289	444	235	447	250	84	156	4	G 1	6.5	96528388
GT-H-60 PN 10 G 1 H	60	414	528	342	532	299	102	199	4	G 1	12.8	96528389
GT-H-80 PN 10 G 1 H	80	414	724	342	730	229	201	306	4	G 1	18.0	96528390
GT-H-100 PN 10 G 1 H	100	430	475	380	720	380	125	156	4	G 1	19.8	97527981

Supporting bracket

Tank type	Size [l]	Dimensions [mm]				
		B1	B2	B3	B4	Z
GT-H-20 PN 10 G 1 H	20	225	201	177	161	-
GT-H-24 PN 10 G 1 H	24	220	165	139	107	10
GT-H-60 PN 10 G 1 H	60	220	165	139	107	9
GT-H-80 PN 10 G 1 H	80	220	165	139	107	9
GT-H-100 PN 10 G 1 H	100	225	201	177	161	-

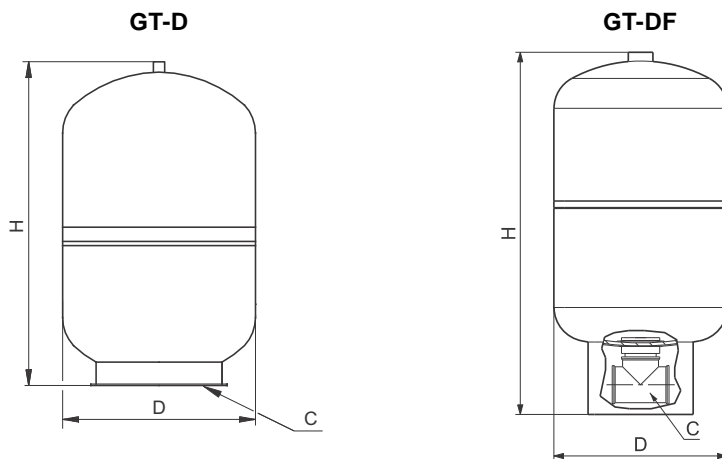
GT-D, 10 bar, GT-DF, 8.6 bar

Vertical installation.

GT-D: Maximum pressure: 10 bar.
Precharge pressure: 1.4 bar.

GT-DF: Maximum pressure: 8.6 bar.
Precharge pressure: 1.4 bar.

Dimensions, weights and product numbers



TM02 9087 2809 - TM04 5936 4409

Fig. 14 Dimensional sketches

Tank type	Size [l]	Dimensions [mm]			Gross weight [kg]	Product number
		D	H	C		
GT-D						
GT-D-130 PN 10 G 1 V	130	420	1120	G 1	24.7	96528344
GT-D-200 PN 10 G 1 1/4 V	200	550	1080	G 1 1/4	38.4	97792897
GT-D-240 PN 10 G 1 1/4 V	240	550	1250	G 1 1/4	43.8	96528346
GT-D-300 PN 10 G 1 1/4 V	300	540	1520	G 1 1/4	52.9	96528347
GT-D-450 PN 10 G 1 1/4 V	450	700	1600	G 1 1/4	80.8	96528348
GT-DF						
GT-DF-80 PN 8.6 G 1 1/4 V	80	432	864	G 1 1/4	20.0	96980804
GT-DF-170 PN 8.6 G 1 1/4 V	170	533	965	G 1 1/4	29.7	96980807
GT-DF-325 PN 8.6 G 1 1/4 V	325	660	1156	G 1 1/4	53.6	96980808

GT-C, GT-CF, 8.6 bar

Vertical installation.

Maximum pressure: 8.6 bar

Precharge pressure: 1.4 bar.

Dimensions, weights and product numbers

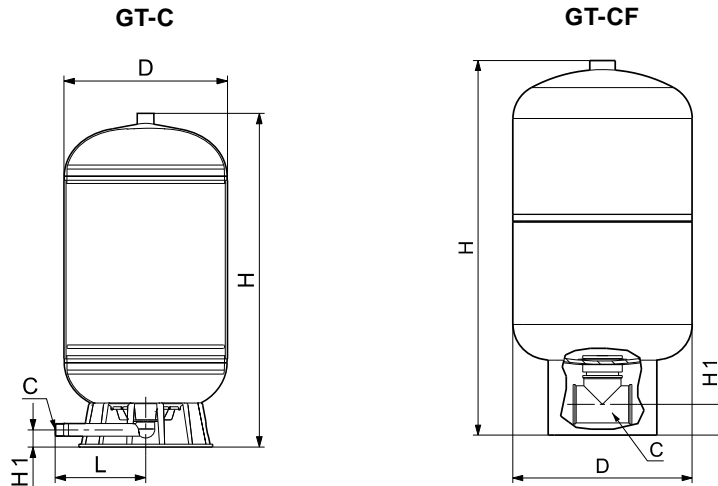


Fig. 15 Dimensional sketches

TM04 5588 3509 - TM04 5423 3309

Tank type	Size [l]	Dimensions [mm]					Gross weight [kg]	Product number
		D	H	H1	L	C		
GT-C								
GT-C-60 PN 8.6 G 1 V	60	430	660	44.5	239	G 1	8.6	96733303
GT-C-80 PN 8.6 G 1 V	80	430	860	44.5	239	G 1	10.9	96733304
GT-C-100 PN 8.6 G 1 V	100	430	980	44.5	239	G 1	10.0	96733305
GT-C-130 PN 8.6 G 1 V	130	430	1240	44.5	239	G 1	15.4	96733306
GT-C-200 PN 8.6 G 1 1/4 V	200	560	1110	57	302	G 1 1/4	20.2	96733307
GT-C-250 PN 8.6 G 1 1/4 V	250	560	1310	57	302	G 1 1/4	25.0	96733308
GT-C-300 PN 8.6 G 1 1/4 V	300	560	1655	57	302	G 1 1/4	28.2	96733309
GT-C-350 PN 8.6 G 1 1/4 V	350	625	1460	57	340	G 1 1/4	33.1	96733310
GT-C-450 PN 8.6 G 1 1/4 V	450	626	1840	57	340	G 1 1/4	36.3	96733311
GT-CF								
GT-CF-60 PN 8.6 G 1 1/4 V	60	432	686	45	-	G 1 1/4	8.6	96980809
GT-CF-80 PN 8.6 G 1 1/4 V	80	432	864	45	-	G 1 1/4	10.9	96980810
GT-CF-150 PN 8.6 G 1 1/4 V	150	635	800	57	-	G 1 1/4	15.7	96980811
GT-CF-200 PN 8.6 G 1 1/4 V	200	559	1118	57	-	G 1 1/4	20.2	96980822

5. Heating

Applications

Grundfos supplies two types of tanks that are suitable for both closed heating systems and chilled-water applications.

These tanks can be incorporated in an expansion system in a tiny household or a large multi-storey building.

Typical applications:

- domestic-heating and chilled-water systems
- commercial-building heating and chilled-water systems
- industrial heating and chilled-water systems.

Tank range

GT-HR, diaphragm tank

GT-HR tanks are conventional diaphragm-type expansion tanks suitable for vertical installation.

GT-HR tanks range from 8 to 1000 litres with a maximum pressure of 6 bar. The tanks have a non-replaceable diaphragm that is precharged with nitrogen at 1.5 bar.

GT-HR tanks have a non-toxic SBR rubber diaphragm that divides the tank chamber into two compartments. The upper compartment contains compressed nitrogen. The lower compartment has a liner of polypropylene (PP) and is filled with water from the pump.

You can use GT-HR tanks with any Grundfos pump.

GT-U+, bladder tank

GT-U+ tanks are bladder tanks ranging from 100 to 3000 litres with a maximum pressure of either 10, 16 or 25 bar. The tanks have a replaceable bladder precharged at 4 bar.

GT-U+ tanks are suitable for both heating and cold-water applications. For more information, see [GT-U+, bladder tank](#), page 6.

Selection of a GT-HR tank

The required tank volume can be calculated from the formula below:

$$V_e = \frac{(0.07 \times t - 2.5) \times (p_s + 1)}{100 \times (p_s - p_e)} \times V \text{ [litres]}$$

V_e : Tank volume [litres]

t : Maximum temperature in system [°C]

p_s : Maximum system pressure [bar] (safety valve pressure)

p_e : Precharge pressure [bar]

V : Total volume of water in system [litres]

If the necessary information required to calculate the tank according to the formula is not available, the sizing of the tank can be based on heat input to the installation and maximum system pressure.

Pre-conditions

Heating systems:

- flat radiators
- specific water volume of 11.3 l/kW
- flow-pipe temperature of 70 °C
- return-pipe temperature of 50 °C.

Maximum system pressure [bar]	6	
Precharge pressure [bar]	1.5	Tank size [l]
	4	8
	8	12
	16	18
	27	25
	44	35
	60	50
	100	80
	120	100
Heat input [kW]	170	140
	250	200
	310	250
	370	300
	490	400
	620	500
	740	600
	990	800
	1230	1000

Grundfos recommendation

- Set the tank precharge pressure to at least 0.2 bar above the static pressure of the heating system.
- The tank precharge pressure must not be lower than 1 bar.

Sizing example

A heating system has a heat input of 160 kW, the maximum system pressure is 6 bar, and the heating system will be precharged by 1.5 bar.

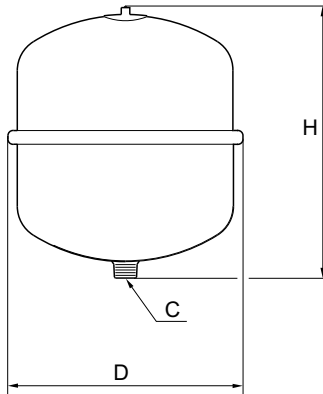
Use the column for 6 bar maximum system pressure. The nearest value above 160 kW is 170 kW. This corresponds to a tank size of 140 litres.

GT-HR, 6 bar

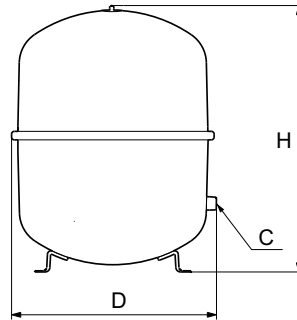
Vertical installation.
Maximum pressure: 6 bar.
Precharge pressure: 1.5 bar.

Dimensions, weights and product numbers

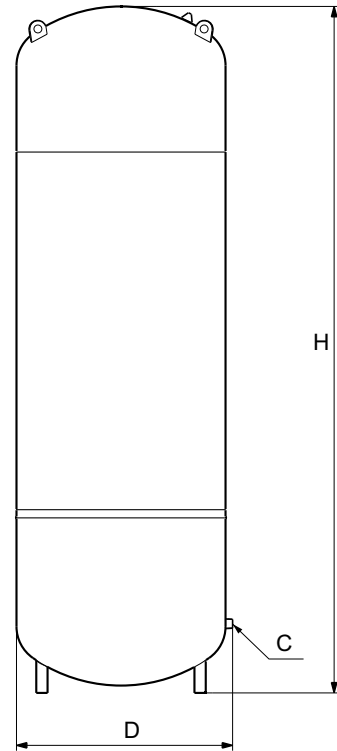
8 to 25 litres



35 to 140 litres



200 to 1000 litres



TM03 1681 2809 - TM03 1682 2809 - TM03 1694 2809

Fig. 16 Dimensional sketches

Tank type	Size [l]	Dimensions [mm]			Gross weight [kg]	Product number
		D	H	C		
GT-HR-8 PN 6 R 3/4 V	8	206	305	R 3/4	1.9	96573376
GT-HR-12 PN 6 R 3/4 V	12	280	275	R 3/4	2.6	96573377
GT-HR-18 PN 6 R 3/4 V	18	280	380	R 3/4	3.5	96573378
GT-HR-25 PN 6 R 3/4 V	25	280	490	R 3/4	4.6	96573390
GT-HR-35 PN 6 R 3/4 V	35	354	460	R 3/4	5.4	96573393
GT-HR-50 PN 6 R 3/4 V	50	409	493	R 3/4	12.5	96573395
GT-HR-80 PN 6 R 1 V	80	480	565	R 1	17.0	96573396
GT-HR-100 PN 6 R 1 V	100	480	670	R 1	20.5	96573397
GT-HR-140 PN 6 R 1 V	140	480	912	R 1	28.6	96573398
GT-HR-200 PN 6 R 1 V	200	634	758	R 1	36.7	96573399
GT-HR-250 PN 6 R 1 V	250	634	888	R 1	45.0	96573400
GT-HR-300 PN 6 R 1 V	300	634	1092	R 1	52.0	96573401
GT-HR-400 PN 6 R 1 V	400	740	1102	R 1	65.0	96573403
GT-HR-500 PN 6 R 1 V	500	740	1312	R 1	79.0	96573404
GT-HR-600 PN 6 R 1 V	600	740	1531	R 1	85.0	96573405
GT-HR-800 PN 6 R 1 V	800	740	1996	R 1	103.0	96573407
GT-HR-1000 PN 6 R 1 V	1000	740	2406	R 1	120.0	96573408

6. Grundfos Product Center

Online search and sizing tool to help you make the right choice.

<http://product-selection.grundfos.com>



"SIZING" enables you to size a pump based on entered data and selection choices.

"REPLACEMENT" enables you to find a replacement product. Search results will include information on the following:

- the lowest purchase price
- the lowest energy consumption
- the lowest total life cycle cost.

The screenshot shows the Grundfos Product Center website. At the top, there is a navigation bar with the logo and menu items: HOME, FIND PRODUCT, COMPARE, YOUR PROJECTS, SAVED ITEMS, HELP. Below the navigation bar is a search bar with a magnifying glass icon and a 'SEARCH' button. The main content area is divided into four sections: SIZING (Enter pump sizing), CATALOGUE (Products and services), REPLACEMENT (Replace an old pump with a new), and LIQUIDS (Find pump by liquid). Below these sections is a 'QUICK SIZING' form with input fields for 'Flow (Q)*' (m³/h) and 'Head (H)*' (m), and radio buttons for 'Select what to size by': 'Size by application', 'Size by pump design', and 'Size by pump family'. A 'START SIZING' button is located to the right of the form. At the bottom of the form, there are options for 'ADVANCED SIZING': 'Advanced sizing by application' and 'Guided selection'.

"CATALOGUE" gives you access to the Grundfos product catalogue.

"LIQUIDS" enables you to find pumps designed for aggressive, flammable or other special liquids.

All the information you need in one place

Performance curves, technical specifications, pictures, dimensional drawings, motor curves, wiring diagrams, spare parts, service kits, 3D drawings, documents, system parts. The Product Center displays any recent and saved items - including complete projects - right on the main page.

Downloads

On the product pages, you can download installation and operating instructions, data booklets, service instructions, etc. in PDF format.

Subject to alterations.

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